

LISTING OF THE CLAIMS

1.-23. (Cancelled)

24. (New) A method of performing a leveling action on a vehicle having a height adjustable air suspension system and undergoing a vehicle acceleration, said method comprising steps of:

- a) initiating a leveling action adjusting said suspension system toward a pre-determined height condition of the vehicle;
- b) discontinuing said leveling action prior to said suspension system achieving said pre-determined height condition;
- c) waiting until said vehicle acceleration decreases below a first pre-determined acceleration threshold; and,
- d) continuing said leveling action adjusting said suspension system toward said pre-determined height condition.

25. (New) A method according to claim 24, wherein said suspension system includes a controller and said method includes said controller acting to at least partially execute step a).

26. (New) A method according to claim 25, wherein said method includes said controller acting to at least partially execute at least one of steps b) and d).

27. (New) A method according to claim 24, wherein said method includes steps of determining said vehicle acceleration, comparing said vehicle acceleration with a second pre-determined acceleration threshold that is greater than said first pre-

determined acceleration threshold, and determining that said vehicle acceleration is above said second pre-determined acceleration threshold prior to step b).

28. (New) A method according to claim 27, wherein said air suspension system includes an accelerometer, and said method includes steps of said accelerometer measuring the acceleration and communicating a signal to said controller.

29. (New) A method according to claim 27, wherein said second pre-determined threshold is an acceleration value of from about 0.2g to about 0.4g.

30. (New) A method according to claim 27, wherein said first pre-determined threshold is an acceleration value of from about 0.05g to about 0.25g.

31. (New) A method according to claim 24, wherein step c) includes waiting until said vehicle acceleration has been below said first pre-determined acceleration threshold for a pre-determined period of time.

32. (New) A method according to claim 31, wherein said pre-determined period of time is one of greater than and substantially equal to about one second.

33. (New) A method of executing a leveling action on a vehicle having a height adjustable air suspension system, said method comprising steps of:

- a) initiating a leveling action adjusting said suspension system toward a pre-determined height condition of the vehicle;
- b) determining an acceleration value of an acceleration acting on the vehicle;
- c) comparing said acceleration value to a first pre-determined threshold value;

- d) discontinuing said leveling action in response to said acceleration value exceeding said first pre-determined threshold value;
- e) waiting until said acceleration value is one of less than and substantially equal to a second pre-determined threshold value that is less than said first pre-determined threshold value; and,
- f) continuing said leveling action adjusting said suspension system toward a pre-determined height condition of the vehicle.

34. (New) A method according to claim 33, wherein step e) includes waiting until said acceleration value has been one of less than and substantially equal to said second pre-determined threshold for a pre-determined duration.

35. (New) A method according to claim 33, wherein said first pre-determined threshold value is from about 0.2g to about 0.4g.

36. (New) A method according to claim 33, wherein said air suspension system includes a controller and step a) includes said controller at least partially executing said leveling action.

37. (New) A method according to claim 36, wherein step d) includes said controller acting to at least partially discontinue said leveling action.

38. (New) A method according to claim 36, wherein step f) includes said controller acting to continue said leveling action once said acceleration value has been one of less than and equal to said second pre-determined value for said pre-determined duration.

39. (New) A method according to claim 33, wherein said air suspension system includes an acceleration-determining device, and step b) includes said acceleration-determining device determining said acceleration value.

40. (New) A method according to claim 39, wherein step e) includes said acceleration-determining device periodically determining an acceleration value corresponding to the acceleration and outputting a signal representative of said acceleration value.

41. (New) A method according to claim 33, wherein said air suspension system includes a comparator, and step b) includes said comparator receiving a signal representative of said acceleration value and comparing said signal to said first pre-determined threshold.

42. (New) A method according to claim 41, wherein step e) includes said comparator comparing a signal representative of said acceleration value to said second pre-determined value.

43. (New) A method according to claim 33, wherein said air suspension system includes a timer and step e) includes said timer monitoring a duration that said acceleration value is one of less than and substantially equal to said second pre-determined threshold.

44. (New) A method of leveling a vehicle having a height adjustable air suspension system that includes a controller, an acceleration-determining device, a comparator and

a memory storing a first pre-determined threshold value and a second pre-determined threshold value that is less than said first pre-determined threshold value, said method comprising steps of:

- a) determining an acceleration value of an acceleration acting on the vehicle using said acceleration-determining device;
- b) comparing said acceleration value to said first pre-determined threshold value using said comparator;
- c) initiating a leveling action using said controller to adjust said suspension system toward a pre-determined height condition of the vehicle in response to said acceleration value being one of less than and substantially equal to said first pre-determined threshold value;
- d) repeating steps a) through c) until said acceleration value is greater than said first pre-determined threshold value;
- e) discontinuing said leveling action prior to said suspension system achieving said pre-determined height condition in response to said acceleration value being greater than said first pre-determined threshold value;
- f) waiting until said acceleration value is one of less than and substantially equal to said second pre-determined threshold value; and,
- g) continuing said discontinued leveling action adjusting said suspension system toward said pre-determined height condition.

45. (New) A method according to claim 44, wherein said suspension system includes a timer and step f) includes determining that said acceleration value is one of less than and substantially equal to said second pre-determined threshold value for a pre-determined period of time using said timer.

46. (New) A method according to claim 44 further comprising a step a repeating steps a) to g) after said suspension system has achieved said pre-determined height condition in step g).